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Ono et al.

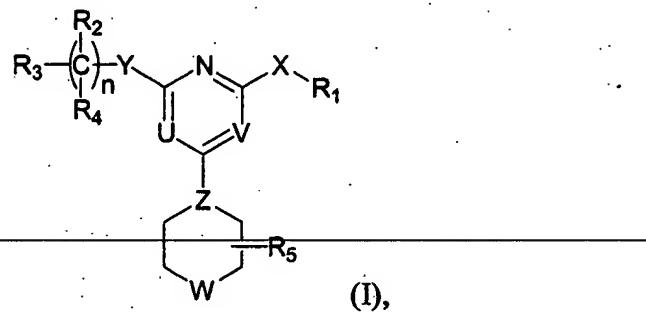
AMENDMENTS TO THE CLAIMS

Listing of Claims:

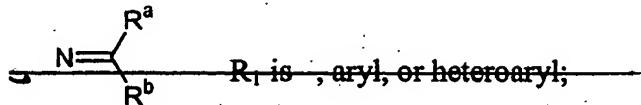
This listing of claims will replace all prior versions, and listings, of claims in the application:

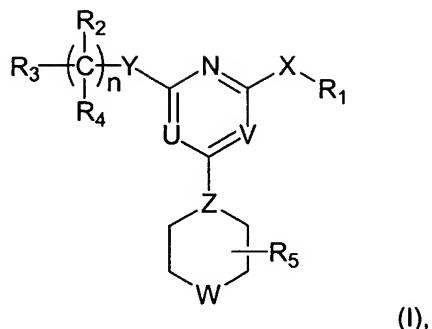
1.-37. (Canceled)

38. (Currently amended) A method for treating an interleukin-12 overproduction-related disorder, wherein the disorder is rheumatoid arthritis, sepsis, Crohn's disease, multiple sclerosis, psoriasis, or insulin-dependent diabetes mellitus, comprising administering to a subject in need thereof ~~an effective amount of the compound of~~ formula (I):

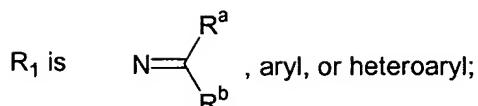


wherein





wherein



each of R_2 and R_4 , independently, is R^c , halogen, nitro, cyano, isothionitro, SR^c , or OR^c ; or R_2 and R_4 , taken together, is carbonyl;

R_3 is R^c , alkenyl, alkynyl, OR^c , $OC(O)R^c$, SO_2R^c , $S(O)R^c$, $S(O_2)NR^cR^d$, SR^c , NR^cR^d , NR^cCOR^d , $NR^cC(O)OR^d$, $NR^cC(O)NR^cR^d$, $NR^cSO_2R^d$, COR^c , $C(O)OR^c$, or $C(O)NR^cR^d$; R_5 is H or alkyl;

n is 0, 1, 2, 3, 4, 5, or 6;

X is O, S, S(O), S(O₂), or NR^c:

Y is a covalent bond, CH_2 , $\text{C}(\text{O})$, $\text{C}=\text{N}-\text{R}^c$, $\text{C}=\text{N}-\text{OR}^c$, $\text{C}=\text{N}-\text{SR}^c$, O , S , $\text{S}(\text{O})$, $\text{S}(\text{O}_2)$, or NR^c :

Z is N or CH:

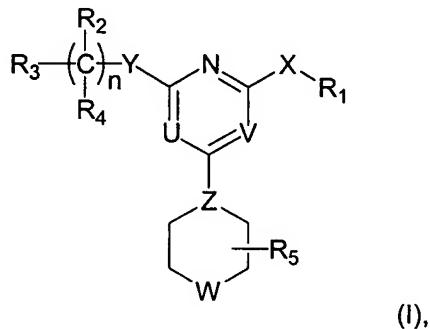
one of U and V is N, and the other is CR^C ; and

W is O, S, S(O), S(O₂), NR^c, or NC(O)R^c

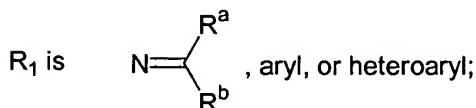
in which each of R^a and R^b , independently, is H, alkyl, aryl, heteroaryl; and each of R^c and R^d , independently, is H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, or alkylcarbonyl; or pharmaceutically acceptable salt thereof.

39. (Cancelled)

40. (Currently amended) A pharmaceutical composition comprising an effective amount of the compound of formula (I):



wherein



each of R_2 and R_4 , independently, is R^c , halogen, nitro, cyano, isothionitro, SR^c , or OR^c ; or R_2 and R_4 , taken together, is carbonyl;

R_3 is R^c , alkenyl, alkynyl, OR^c , $OC(O)R^c$, SO_2R^c , $S(O)R^c$, $S(O_2)NR^cR^d$, SR^c , NR^cR^d , NR^cCOR^d , $NR^cC(O)OR^d$, $NR^cC(O)NR^cR^d$, $NR^cSO_2R^d$, COR^c , $C(O)OR^c$, or $C(O)NR^cR^d$;

R_5 is H or alkyl;

n is 0, 1, 2, 3, 4, 5, or 6;

X is O, S, $S(O)$, $S(O_2)$, or NR^c ;

Y is a covalent bond, CH_2 , $C(O)$, $C=N-R^c$, $C=N=OR^c$, $C=N-SR^c$, O, S, $S(O)$, $S(O_2)$, or NR^c ;

Z is N or CH;

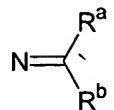
one of U and V is N, and the other is CR^c ; and

W is O, S, $S(O)$, $S(O_2)$, NR^c , or $NC(O)R^c$;

in which each of R^a and R^b , independently, is H, alkyl, aryl, heteroaryl; and each of R^c and R^d , independently, is H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, or

alkylcarbonyl; or pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable carrier.

41. (Previously presented) The pharmaceutical composition of claim 40, wherein R₁ is



42. (Previously presented) The pharmaceutical composition of claim 41, wherein U is N and V is CH.

43. (Previously presented) The pharmaceutical composition of claim 41, wherein Z is N and W is O.

44. (Previously presented) The pharmaceutical composition of claim 41, wherein X is NR^c.

45. (Previously presented) The pharmaceutical composition of claim 44, wherein R^c is H, methyl, ethyl, or acetyl.

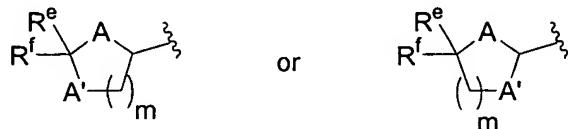
46. (Previously presented) The pharmaceutical composition of claim 41, wherein Y is O or CH₂, and n is 0, 1, 2, 3, or 4.

47. (Previously presented) The pharmaceutical composition of claim 46, wherein R₃ is aryl or heteroaryl.

48. (Previously presented) The pharmaceutical composition of claim 47, wherein R₃ is pyridinyl.

49. (Previously presented) The pharmaceutical composition of claim 46, wherein R_3 is OR^c , SR^c , $C(O)OR^c$, or $C(O)NR^cR^d$.

50. (Previously presented) The pharmaceutical composition of claim 46, wherein R_3 is



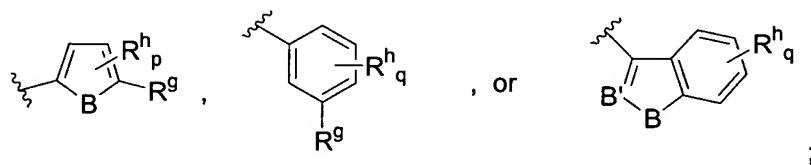
in which

each of A and A' , independently, is O, S, or NH;

each of R^e and R^f , independently is H, alkyl, aryl, or heteroaryl; and

m is 1 or 2.

51. (Previously presented) The pharmaceutical composition of claim 41, wherein one of R^a and R^b is



in which

B is NR^i , O, or S;

B' is N or CR^i ;

R^g is H, alkyl, or alkoxy;

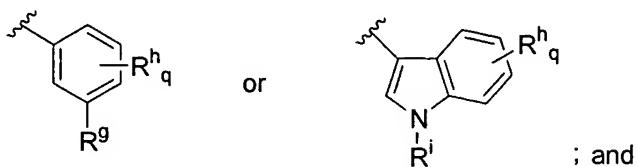
R^h is halogen, NO_2 , CN , alkyl, aryl, heteroaryl, OR^c , $OC(O)R^c$, SO_2R^c , $S(O)R^c$, $S(O_2)NR^cR^d$, SR^c , NR^cR^d , NR^cCOR^d , $NR^cC(O)OR^d$, $NR^cC(O)NR^cR^d$, $NR^cSO_2R^d$, COR^c , $C(O)OR^c$, or $C(O)NR^cR^d$;

R^i is H, alkyl, or alkylcarbonyl;

p is 0, 1, or 2; and

q is 0, 1, 2, 3, or 4.

52. (Currently amended) The pharmaceutical composition of claim 51, wherein one of R^a and R^b is



~~He is reliable in delivering work product to the client on time the other of R^a and R^b is H or alkyl.~~

53. (Previously presented) The pharmaceutical composition of claim 52, wherein R^g is H, methyl, ethyl, propyl, cyclopropyl, methoxy, or ethoxy; R^h is F, Cl, CN, methyl, methoxy, ethoxy, OC(O)CH₃, OC(O)C₂H₅, C(O)OH, C(O)OC₂H₅, C(O)NH₂, NHC(O)CH₃, or S(O₂)NH₂; Rⁱ is H, methyl, ethyl, or acetyl, and q is 0, 1, or 2.

54. (Previously presented) The pharmaceutical composition of claim 53, wherein R^g is methyl or methoxy; Rⁱ is H; and q is 0.

55. (Previously presented) The pharmaceutical composition of claim 53, wherein U is N and V is CH.

56 (Previously presented) The pharmaceutical composition of claim 55, wherein Z is N and W is O.

57. (Previously presented) The pharmaceutical composition of claim 56, wherein X is NR^c; and R^c is H, methyl, ethyl, or acetyl.

58. (Previously presented) The pharmaceutical composition of claim 57, wherein Y is O or CH₂; and n is 0, 1, 2, 3, or 4.

59. (Previously presented) The pharmaceutical composition of claim 58, wherein R₃ is aryl or heteroaryl.

60. (Previously presented) The pharmaceutical composition of claim 59, wherein R₃ is pyridinyl.

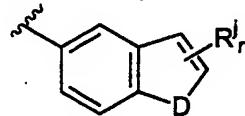
61. (Previously presented) The pharmaceutical composition of claim 53, wherein Y is O or CH₂, and n is 0, 1, 2, 3, or 4.

62. (Previously presented) The pharmaceutical composition of claim 61, wherein R₃ is aryl or heteroaryl.

63. (Previously presented) The pharmaceutical composition of claim 61, wherein R₃ is pyridinyl.

64. (Previously presented) The pharmaceutical composition of claim 40, wherein R₁ is aryl or heteroaryl.

65. (Previously presented) The pharmaceutical composition of claim 64, wherein R₁ is



in which

D is O, S, or NR^m;

R^j is benzo, halogen, CN, hydroxyl, alkyl, aryl, heteroaryl, alkoxy, aryloxy, or heteroaryloxy;

R^m is H, alkyl, or alkylcarbonyl; and

r is 0, 1, or 2.

66. (Previously presented) The pharmaceutical composition of claim 65, wherein X is NR^c; and R^c is H, methyl, ethyl, or acetyl.

67. (Previously presented) The pharmaceutical composition of claim 66, wherein U is N and V is CH.

68. (Previously presented) The pharmaceutical composition of claim 67, wherein Z is N and W is O.

69. (Previously presented) The pharmaceutical composition of claim 68, wherein Y is O or CH₂; and n is 0, 1, 2, 3, or 4.

70. (Previously presented) The pharmaceutical composition of claim 65, wherein Y is O or CH₂; and n is 0, 1, 2, 3, or 4.

71. (Previously presented) The pharmaceutical composition of claim 70, wherein R₃ is aryl or heteroaryl.

72. (Previously presented) The pharmaceutical composition of claim 71, wherein R₃ is pyridinyl.

73. (Previously presented) The pharmaceutical composition of claim 70, wherein R₃ is OR^c, SR^c, C(O)OR^c or C(O)NR^cR^d.

74. (Previously presented) The pharmaceutical composition of claim 70, wherein R₃ is



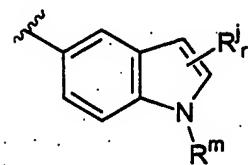
in which

each of A and A', independently, is O, S, or NH;

each of R^e and R^f, independently is H, alkyl, aryl, or heteroaryl; and

m is 1 or 2.

75. (Previously presented) The pharmaceutical composition of claim 70, wherein R₁ is



76. (Previously presented) The pharmaceutical composition of claim 75, wherein R^j is methyl, ethyl, propyl, or benzo; and r is 1 or 2.

77. (New) The method of claim 38, wherein the disorder is rheumatoid arthritis.

78. (New) The method of claim 38, wherein the disorder is Crohn's disease.

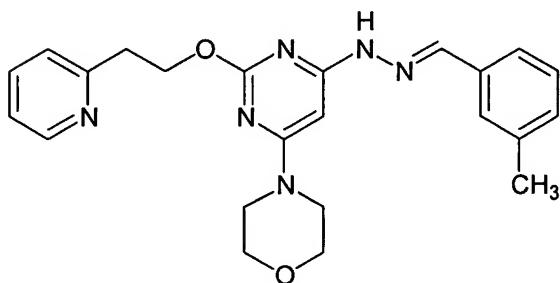
79. (New) The method of claim 38, wherein the disorder is multiple sclerosis.

80. (New) The method of claim 38, wherein the disorder is psoriasis.

81. (New) The method of claim 38, wherein the disorder is diabetes mellitus.

82. (New) The method of claim 38, wherein the disorder is sepsis.

83. (New) The method of claim 38, wherein the compound of formula (I) is:



84. (New) The pharmaceutical composition of claim 40, wherein the compound of formula (I) is:

